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EXAMINER

BARQADLE, YASIN M

ART UNIT PAPER NUMBER

2153

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/734,040

Applicant(s)

VILANDER ET AL.

Examiner

Yasin M Barqadle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                                        |                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

1. Claims 1-17 are presented for examination.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "XTP" in claims 9, 11 and 17 are used by the claim to mean "new XTP protocol", while the accepted meaning is "Express Transfer Protocol". Since it is well established in the art that the acronym XTP refers to Express Transfer Protocol, XTP cannot constitute part of any claims within the same or neighboring technical fields, bearing another meaning. Such manner of claiming causes difficulty in

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determining the scope of the claims and makes it impossible to search.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C.-102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-12 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Toporek et al USPN (6654344).

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As per claim 1, Toporek et al teach a telecommunications system having a protocol architecture over an interface between nodes of the telecommunications system (Fig. 2), the protocol architecture including Internet Protocol as a protocol above a link layer protocol (Fig. 2, IP layer 227 over link layer 225), wherein the interface is **one of** (1) an interface between a core -network and a radio access network which carries circuit switched connections; (2) an interface between a radio network controller (RNC) and a base station; and (3) an interface between two radio network controllers (RNCs) [see fig. 2, and col. 3, lines 1-13].

As per claim 2, Toporek et al teach the system of claim 1, wherein the Internet Protocol is immediately above the link layer protocol in the transport network layer [Fig. 2, see satellite gateway 203, layer 23-229].

As per claim 3, Toporek et al teach the system of claim 1, wherein the interface carries a circuit switched connection (fig. 2; col. 10, lines 29-65), and wherein a protocol stack of the protocol architecture in the transport network layer comprises:

the link layer protocol [fig. 2, layers 225]; the Internet Protocol on top of the link layer protocol [fig. 2, layers 229];

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UDP Protocol on top of the Internet Protocol [fig. 2, layers 227 and col. 10, lines 33-65].

As per claim 4, Toporek et al teach the system of claim 3, wherein the link layer protocol is Ethernet protocol [col. 6, lines 6-15].

As per claim 5, Toporek et al teach the system of claim 4, wherein in the Internet Protocol a sequence number is carried in one of an IP option field and a Ipv6 extension header, the sequence number being used for rearranging incoming IP datagrams [fig. 2; col. 7, lines 59 to col. 8, line 45].

As per claim 6, Toporek et al teach the system of claim 3, wherein the protocol stack of the protocol architecture further comprises, in a radio network layer, a frame handling protocol on top of the UDP Protocol [col. 11, lines 46 to col. 12, line 13].

As per claim 7, Toporek et al teach the system of claim 6, wherein the frame handling protocol rearranges incoming frames over the interface which carries a circuit switched connection [fig. 2; col. 10, lines 29-65].

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As per claim 8, Toporek et al teach the system of claim 7, wherein the frame handling protocol includes a sequence number field used for rearranging incoming frames [col. 7, lines 59 to col. 8, line 35 and col. 9, lines 29-45].

As per claim 9 and 17, Toporek et al teach the system of claim 1, wherein the protocol stack of the protocol architecture in the transport network layer comprises:

the link layer protocol [fig. 2, layers 225]; the Internet Protocol on top of the link layer protocol [fig. 2, layers 229];

UDP Protocol on top of the Internet Protocol [fig. 2, layers 227]; and

XTP Protocol on top of the UDP Protocol [fig. 2 and 2A; col. 11, lines 46 to col. 12, line 23].

As per claim 10, Toporek et al teach the system of claim 9, wherein the link layer protocol is Ethernet protocol [col. 6, lines 6-15].

As per claim 11, Toporek et al teach the system of claim 9, wherein each XTP packet has a connection identifier and a sequence number [col. 8, lines 20-35].

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As per claim 12, Toporek et al teach the system of claim 9, wherein plural user plane data frames are multiplexed in one IP datagram [fig. 2A and col. 11, lines 46-67].

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toporek et al USPN (6654344) in view of Michael Menth, Report No. 247 (hereafter ``Menth'').

As per claims 13 and 14, Toporek et al teach the system of claim 1, wherein the protocol stack of the protocol architecture in the transport network layer comprises:

the link layer protocol [fig. 2, layers 225];

the Internet Protocol on top of the link layer protocol [fig. 2, layers 229];

UDP Protocol on top of the Internet Protocol [fig. 2, layers 227]; and



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Although Toporek et al shows substantial features of the claimed invention, he does not explicitly show an RTP protocol on top on top of UDP Protocol.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the system disclosed by Toporek et al, as evidenced by Menth Report No. (247).

In analogous art, Menth whose invention is about carrying wireless traffic over IP using Realtime Transport Protocol discloses an RTP protocol on top of a UDP Protocol [page 1, introduction and page 4, paragraph 1]. Giving the teaching of Menth, a person of ordinary skill in the art would have readily recognized the desirability and the advantage of modifying Toporek et al by employing the Menth's RTP over UDP in order to maximize cellular mobile communications by reducing header overhead.

Menth further teaches a UAL2 Protocol on top of the UDP Protocol, wherein the UAL2 protocol each UAL2-PDU carries an integer number of AAL2 packets [page 2, paragraphs 1-2 and page 4, paragraphs 1-2].

As per claim 15, Menth teaches the system of claim 14, wherein the interface is between a radio access network and a core network, and wherein in the RTP Protocol one synchronization source (SSRC) identifier is allocated to each circuit switched connection between the node in the

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radio access network and the node in the core network [fig. 1 and page 4, paragraphs 1-4].

As per claim 16, Menth teaches the system of claim 14, wherein the RTP Protocol compresses plural RTP packets in an IP datagram [page 1, abstract].

### Conclusion

5. The prior made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yasin Bargadle whose telephone number is 703-305-5971. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 703-305-4792. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Yasin Bargadle

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**FRANTZ B. JEAN**  
**PRIMARY EXAMINER**